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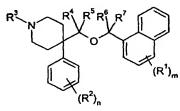
- (74) Agent: ASTRAZENECA AB; Global Intellectual Property, S-151 85 Södertälje (SE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
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Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NAPHTHYL ETHER COMPOUNDS AND THEIR USE



(57) Abstract: Compounds having the following structure wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷ m and n are as defined in the specification, *in vivo*-hydrolysable precursors thereof, pharmaceutically-acceptable salts thereof, the use in therapy and pharmaceutical compositions and methods of treatment using the same.



INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C07D 211/22, A61K 31/451, A61P 25/00, A61P 9/00 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C07D, A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, CHEM.ABS.DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	GB 2347423 A (MERCK SHARP & DOHME LIMITED), 6 Sept 2000 (06.09.00), claims 8,16-18, page 38, line 23 - line 26	1-11
X	J. Med. Chem., Volume 38, No. 8, 1995, Graeme I. Stevenson et al, "4,4-Disubstituted Piperidines: A New Class of NK1 Antagonist", pages 1264-1266	1-11
X	J. Med. Chem., Volume 41, No. 23, 1998, Graeme I. Stevenson et al, "4,4 Disubstituted Piperidine High-Affinity NK1, Antagonists: Structure-Activity Relationships and in Vivo Activity", pages 4623-4635	1-11

X	Further documents are listed in the continuation of Box	C.	See patent family annex.
* "A" "E" "L" "O" "P"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance carlier application or patent but published on or after the international filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed	"T" "X" "Y"	considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
20	e of the actual completion of the international search October 2003		of mailing of the international search report 2 1 -10- 2003
Sw	ne and mailing address of the ISA/ edish Patent Office c 5055, S-102 42 STOCKHOLM		D STRANDELL/BS

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Form PCT/ISA/210 (continuation of second sheet) (July 1998)

International application No. PC1. 22 03/01399

	•	PL 1750	1333
C (Continua	ation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relev	ant passages	Relevant to claim No
X	WO 9519344 A1 (MERCK SHARP & DOHME LIMTED), 20 July 1995 (20.07.95), the claims, page 12 - page 19, line 20	18, line	1-11
x .	WO 9410165 A1 (MERCK SHARP & DOHME LIMTED), 11 May 1994 (11.05.94), the claims, page 16 - page 21, line 29	20, line	1-11
-			
A	Bioorganic & Medicinal Chemistry Letters, Volu 12, No. 13. 8 July 2002, Jason M. Elliott "4,4-Disubstituted Cyclohexylamine NK1 Red Antagonists I", pages 1755-1758, page 1758, table 3, compound nos. 23,27	et al,	1-11
	· ·		
A .	Bioorganic & Medicinal Chemistry Letters, Volu 12, No. 2, 2002, Thomas Ryckmans et al, "R NK1 Antagonists-Serotonin Reuptake Inhibit Synthesis and SAR of a New Class of Potent Antidepressants", pages 261-264	irst Dual	1-11
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INTERNATIONAL SEARCH REPORT

Information on

t family members

06/09/03

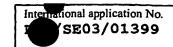
Interminal application No.
PC 03/01399

Publication	,		
date		Patent family member(s)	Publication date
06/09/00	GB GB US	0004167 D 9904786 D 6136824 A	00/00/00 00/00/00 24/10/00
1 20/07/95	AT AU AU CA DE EP ES GB JP US GB	170174 T 685212 B 1390295 A 6216594 A 2180746 A 69504300 D,T 0690734 A 0739336 A,B 2120170 T 9400542 D 9507500 T 5760018 A 9403072 D	15/09/98 15/01/98 01/08/95 11/10/94 20/07/95 29/04/99 10/01/96 30/10/96 16/10/98 00/00/00 29/07/97 02/06/98 00/00/00
1 11/05/94	AT AU DE EP ES GB JP US GB GB	188472 T 678409 B 5342994 A 69327541 D,T 0666856 A,B 2141174 T 9222633 D 8502510 T 5620989 A 9308962 D 9313680 D 9316112 D	15/01/00 29/05/97 24/05/94 10/08/00 16/08/95 16/03/00 00/00/00 19/03/96 15/04/97 00/00/00 00/00/00
, p	A 06/09/00 A1 20/07/95	A 06/09/00 GB GB US A1 20/07/95 AT AU AU AU CA DE EP EP ES GB JP US GB A1 11/05/94 AT AU AU AU DE EP ES GB JP US GB JP US GB JP US GB	A 06/09/00 GB 0004167 D GB 9904786 D US 6136824 A A1 20/07/95 AT 170174 T AU 685212 B AU 1390295 A AU 6216594 A CA 2180746 A DE 69504300 D, T EP 0690734 A EP 0739336 A, B ES 2120170 T GB 9400542 D JP 9507500 T US 5760018 A GB 9403072 D A1 11/05/94 AT 188472 T AU 678409 B AU 5342994 A DE 69327541 D, T EP 0666856 A, B ES 2141174 T GB 9222633 D JP 8502510 T US 5620989 A GB 9308962 D GB 9313680 D



Box I	Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)
This int	ernational search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. 🛛	Claims Nos.: 8-10 because they relate to subject matter not required to be searched by this Authority, namely:
	see next sheet
2. 🔀	Claims Nos.: 1-5,8,9 all in part because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: se next sheet
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Int	ernational Searching Authority found multiple inventions in this international application, as follows:
٠	
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4 —	No required additional coarch face were timely maid but to an illustration of Consequence of the control of the
" LJ	No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark	on Protest The additional search fees were accompanied by the applicant's protest.
	No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT



Box I:1

Claims 8-10 relate to methods of treatment of the human or animal body by surgery or by therapy or diagnostic methods practised on the human or animal body (Rule 39.1(iv)). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds or compositions. These alleged effects must be well defined diseases or conditions.

Box I:2

The expression "a disease condition wherein antagonism of NK $_1$ receptors in combination with SRI activity is beneficial" in claims 8 and 9 may relate to a number of different disorders and conditions, which can not be clearly (Article 6 PCT) defined by this expression. Thus, the search has mainly been restricted to the diseases mentioned in claims 7, 10 and 11.

The scope of the claims 1-5, 8 and 9, in as far as the expression "in vivo-hydrolysable precursor(s) thereof" is concerned, is so unclear (Article 6 PCT) that a meaningful International Search is impossible with regard to this expression.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established will not be the subject of an international preliminary examination (Rule 66.1(e) PCT). This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.